

NYC Audubon's Harbor Herons Program 25th Annual Survey

Wading Bird, Cormorant, and Gull Nesting Activity in 2010



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Harbor Herons Annual Subcommittee Meeting: Greater NY/NJ Harbor
Colonial waterbirds Working Group

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Survey Area

18 and 27 May 2010



Wading birds in NY/NJ Harbor

9 species of long-legged waders

Great Egret *Ardea alba*

Snowy Egret *Egretta thula*

Little Blue Heron *Egretta caerulea*

Tricolored Heron *Egretta tricolor*

Cattle Egret *Bubulcus ibis*

Green Heron *Butorides virescens*

Black-crowned Night-Heron *Nycticorax nycticorax*

Yellow-crowned Night-Heron *Nyctanassa violacea*

Glossy Ibis *Plegadis falcinellus*

Other nesting species

Colonial nesters

Double-crested Cormorant
Phalacrocorax auritus

Herring Gull *Larus argentatus*
Great Black-backed Gull *Larus marinus*



Single nesters

Waterfowl: Canada Goose, Mute Swan,
American Black Duck, Mallard, Gadwall

American Oystercatcher

Passerine sp.

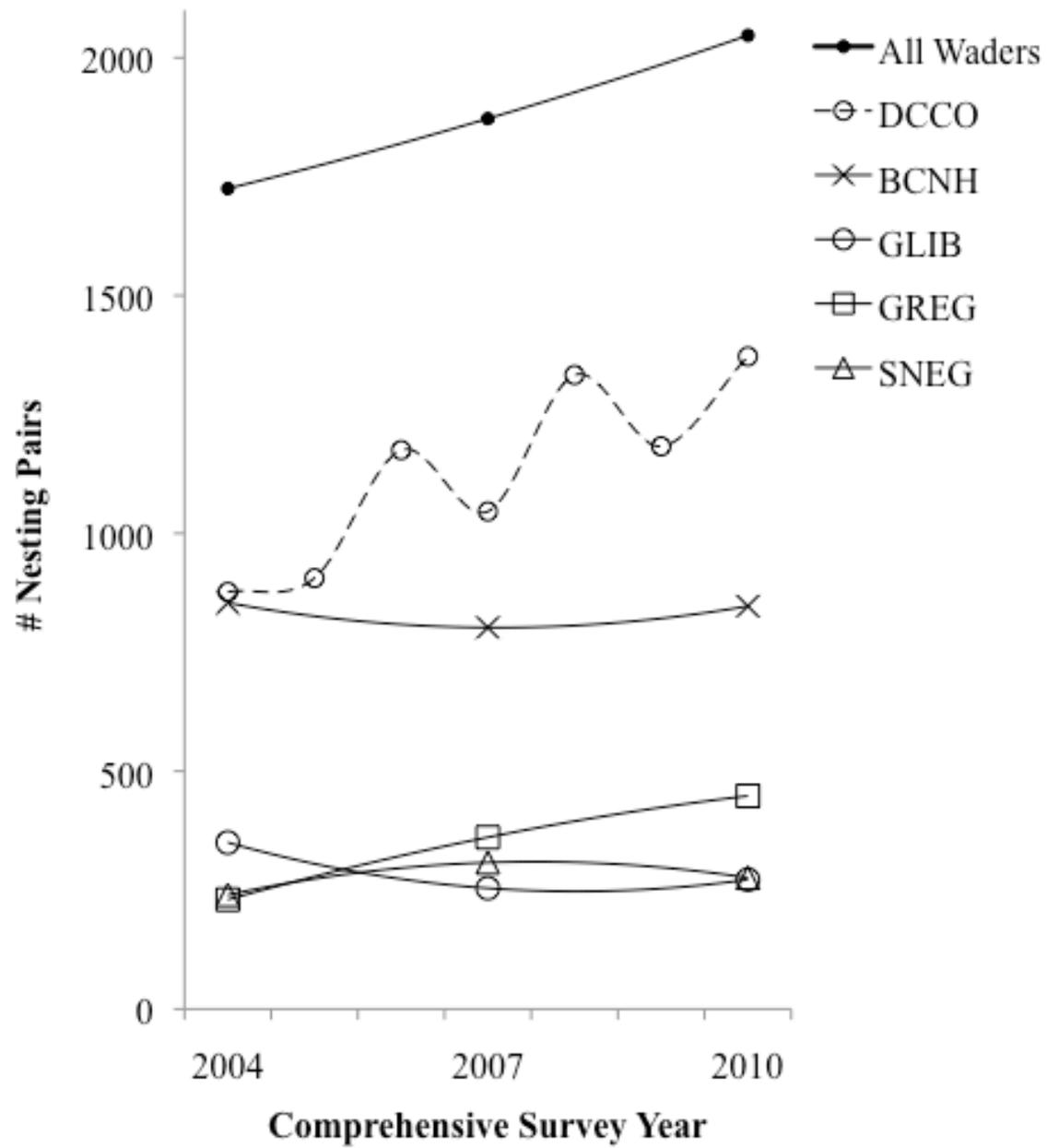


Wading bird nesting activity – 2010 survey*

Species	Nest numbers	Increase or decrease since 2007 comprehensive survey
BCNH	884	Increase (+6%)
GREG	498	Decrease (+24%)
SNEG	276	Increase (-10%)
GLIB	275	Increase (+7%)
YCNH	85	Increase (+150%)
LBHE	13	About the same
TRHE	3	About the same
CAEG	1	About the same
GRHE	1	About the same
TOTAL	2,047	Increased (+14%)

Other colonial waterbirds - 2010

Species	Numbers	Increase or decrease since 2007 comprehensive survey
DCCO	1,372 nests	Decrease (+31%)
GBBG (Based on adult counts)	425 pairs	Similar to 2009
HERG (Based on adult counts)	1,322 pairs	Decreased in 2009 and 2010





Huckleberry Island – 10 acres

With Dave Künstler



- Low numbers of wading birds persist as in 2008 and 2009
 - 21 BCNH adults
 - An increase from the 3 BCNH nests observed in 2009
 - No GREG observed
- 358 DCCO nests : +38% from 2007
- Potential factors in decline:
 - Cormorant expansion, although much suitable nesting habitat remains
 - Human disturbance, although sanctioned access is limited
 - Mammalian predators (Raccoons)

Goose Island – 1 acre

With Dave Künstler



- Total = 111 n (+29%)
- BCNH = 28n (- from 36)
- GREG = 50n (+ from 28)
- SNEG = 33n (- from 38)
- YCNH = 0n
- LBHE = 0n





North Brother – 19 acres



- BCNH nesting ceased
- HERG and GBBG nesting activity largely declined
- Avian and mammalian predators may have played a role in declines

South Brother – 12 acres



- Third largest wading bird colony in 2010 (surpassed by Hoffman and Canarsie Pol)
- Total = 456n (stable)
- BCNH = 230 n (- from 274)
- SNEG = 74 n (- from 93)
- GREG = 132 n (+ from 64)
- GLIB = 6 n (+ from 1)
- YCNH = 6 n (stable)
- CAEG = 0 n
- DCCO = 264 n (+ from 231)
- HERG (14 pairs, stable) and GBBG (82 pairs, increased)



Mill Rock – 3 acres



- 2009 Total = 112 n (+160% since 2007)
- BCNH = 75 (- from 92 n)
- GREG = 19 (+ from 7 n)
- SNEG = 15 (+ from 4 n)
- HERG = 60 (+ from 8 n)
- GBBG = 15 (+ from 9 n)

U Thant – 0.75 acres



- About the same from 2008-2010
- DCCO = 31 n
- HERG = 7 pairs
- GBBG = 22 pairs



Hoffman Island – 10 acres



- Largest wading bird colony in 2009 and 2010
- Total = 624 (+39%)

- BCNH = 305 n (+ from 217)
- GREG = 167 n (+ from 113)
- SNEG = 65 n (- from 99)
- GLIB = 80 n (- from 89)
- LBHE = 1 n (- from 3)
- YCNH = 3 n (+ from 1)
- GRHE = 0 n (since 2009)

- DCCO = 216 n (- from 225)
- HERG (67 pairs; -) and GBBG (146 pairs; +)

Swinburne Island – 4 acres



- DCCO = 320 (+ from 288)
- 1 BCNH
- 0 GRHE

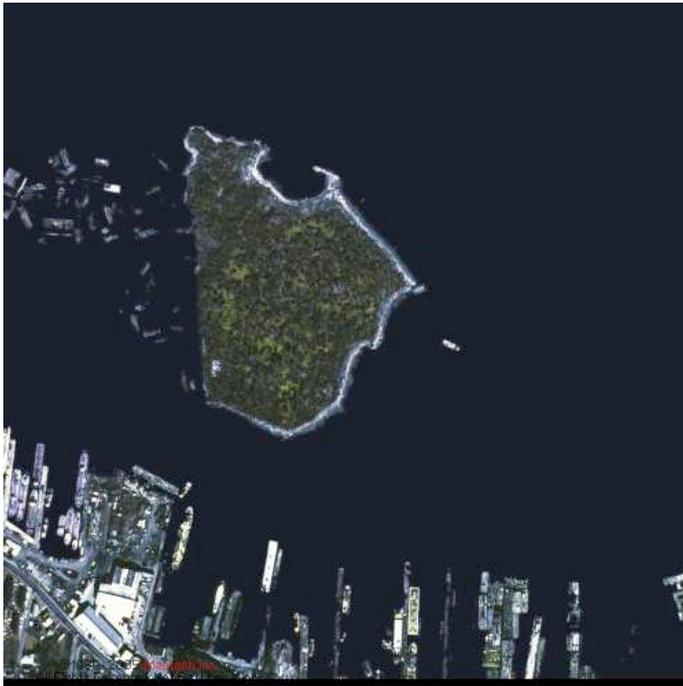
- HERG 177 pairs (+ from 133)
- GBBG 62 pairs (- from 120)





Shooter's Island – 48 acres

Surveyed by Alex Summers



- No wading bird nesting
- DCCO = 35 n - western shore on remnants of drydocks

Prall's Island – 80 acres



Isle of Meadows – 101 acres



- No colonial waterbird nesting activity

Aids to navigation Raritan Bay, AK/KVK

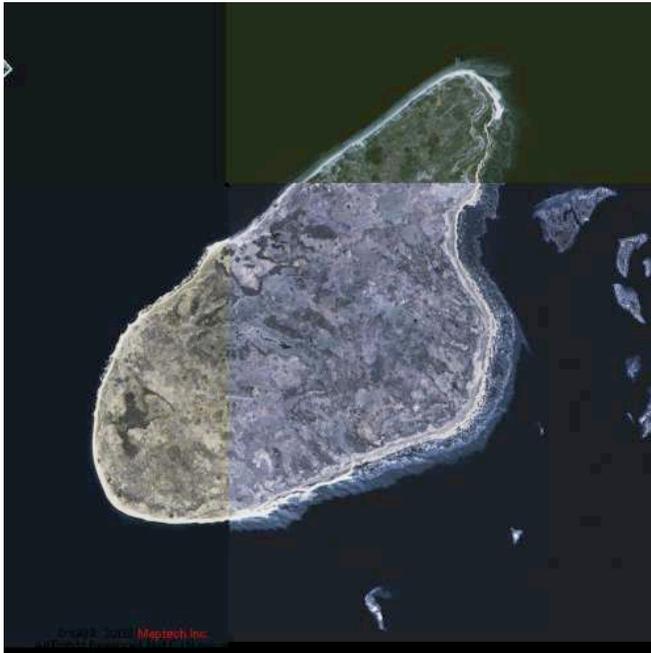


- DCCO = 39 n observed in the Kill Van Kull, Arthur Kill, northwestern Raritan Bay, and Newark Bay (- from 50)



Canarsie Pol – 220 acres

- Most diverse nesting colony in NY harbor
- Total = 497 pairs (+ from 412)



- **DCCO = 144 n**
 - BCNH = 185 n (+ from 125)
 - GREG = 112 n (+ from 89)
 - SNEG = 53 n (- from 60)
 - GLIB = 129 n (+ from 115)
 - YCNH = 2 n (- from 13)
 - LBHE = 12 n (+ from 2)
 - TRHE = 3 n (stable)
 - CAEG = 1 n (stable)
-
- HERG (730 pairs; +) and GBBG (49 pairs; -)

Subway Island – 40 acres

- BCNH 37 n (++ from 2)
- GREG 13 n
- SNEG 25 n
- GLIB 60 n
- HERG (245 pairs; +) and
GBBG (13 pairs; -)



Elder's Marsh East

- DCCO = 4 n
- BCNH = 2 n
- GREG = 5 n
- SNEG = 11 n

- HERG = 60 n
- GBBG = 2 n

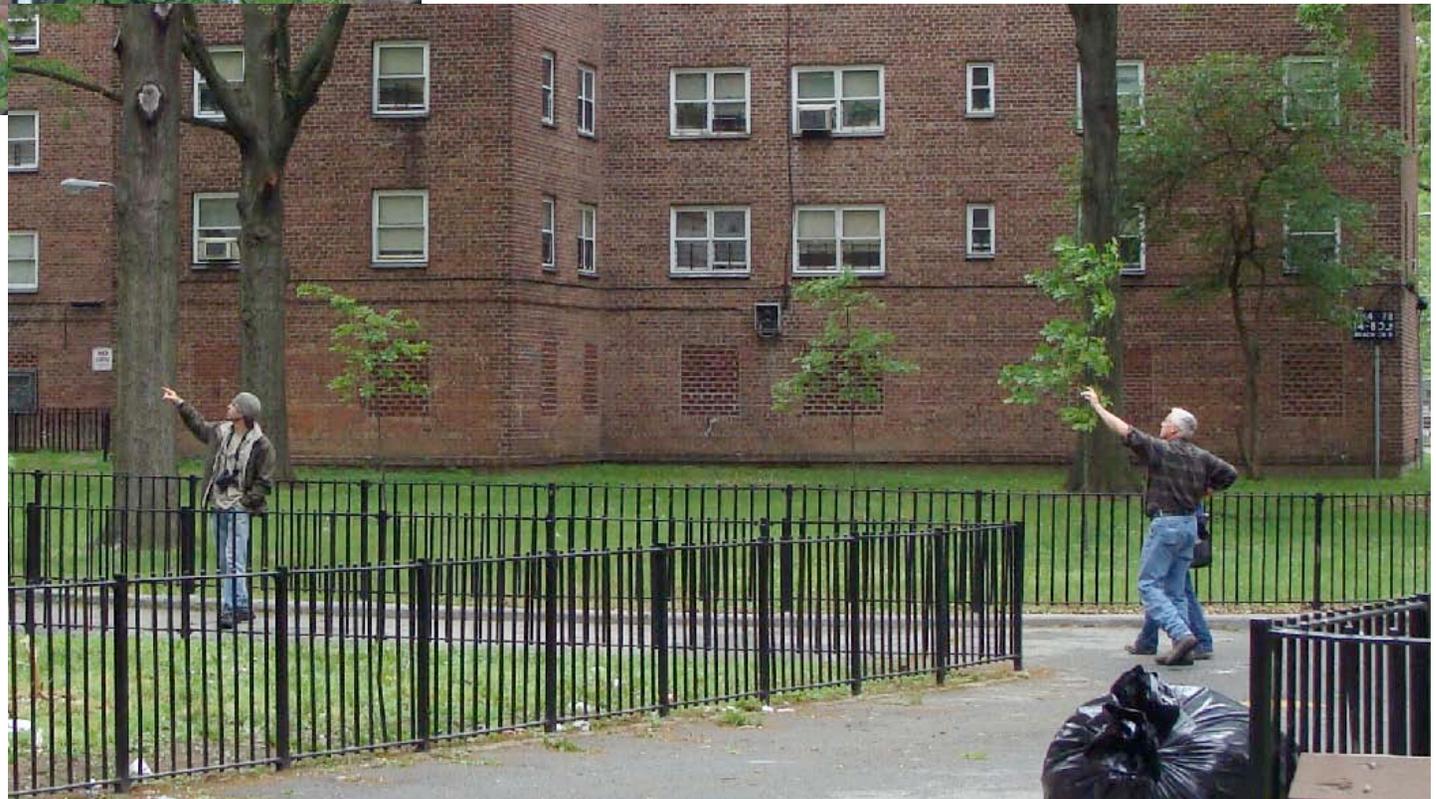
- USACE – marsh restoration



Redfern Houses, Far Rockaway, NY



65 YCNH nests
(questionable nest
success)



Challenges



Kenneth Law USDA-APHIS

- **Habitat**
 - bittersweet, porcelainberry, kudzu
 - attractive nest structure vs long-term degradation of nesting habitat
- **Asian Longhorned Beetle**
 - 2007: confirmed on Prall's Is in March & ~3,500 host trees removed in April, an additional 8,000 at Old Place & Saw Mill, SI
 - Preferred wading bird nesting trees overlap w/ ALB host trees
- **Predation**
 - Mammals (raccoon - Ruffle Bar, Huckleberry I)
 - Birds (owls, fish crows, etc.)
- **Human disturbance**

Thank you

Challenges in methodology

1. Develop a repeatable method for surveying impenetrable/sensitive habitats
 - Canarsie Pol
 - Hoffman and South Brother (grid system)
2. Implement a habitat assessment protocol
3. Monitor productivity to gain better understanding of population statuses
4. Monitor gull population